Leveraging Farmer Field Days to Provide Family Planning and Other Health Services in Rural Kenya

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Abstract

Background: Access to family planning (FP) and other reproductive health (RH) services is difficult in much of rural Africa. Distance to health facilities, staff shortages, stock-outs, and other barriers impede the uptake and continued use of contraception. One way to improve FP access in rural areas is to deliver FP services at non-health events. FHI and Land O’Lakes collaborated to assess a model for providing health services through existing farmer-education events. This study examined the introduction of Family Planning/Reproductive Health services through Land O’Lakes-supported dairy cooperatives. Methods: The study was conducted at seven events in Central and Rift Valley provinces between August and December 2010. Typical field days draw attendees from across the dairy sector: farmers, processors, development partners and officials from the Ministry of Livestock Development and the Kenya Dairy Board. At each study site, local Land O Lakes and dairy cooperative staff helped to incorporate a “family health camp” where attendees could consult with clinicians. The package included FP services, child immunizations, antenatal care, sexually transmitted infection screening and treatment, and HIV counseling and testing. All women, 18 to 49 years old, who received services from an on-site provider, were invited to participate in a survey about the health camp and the offered services. A total of 319 women were interviewed. Key findings: Use of health services at the seven field days was high; more than 80% of the 2,344 attendees received consultations. The services provided most frequently during the field-days were non-reproductive health exams (66%), FP counseling (18%), and HIV counseling and testing (13%). Of the women interviewed, 40% were affiliated with a dairy cooperative. One-quarter of current FP users acquired additional supplies of contraceptives at the event. Knowledge contributions: This study contributes to the scant data regarding the provision of health services in the non-health sector. This model provides a convenient way for rural people to access health services.

Key Words: FP services, non-health sector, rural area, farmers

1. Introduction

In rural sub-Saharan Africa, 25% of married women want to avoid pregnancy but are not using effective contraception.1 Causes of this “unmet need” include religious or cultural objections, concerns about side-effects, myths, rumors, misconceptions and other impacts of contraception on health, lack of knowledge and difficult access to family planning services.2 Weak health systems contribute to access barriers such as long distances to health facilities, shortages of healthcare workers, and periodic unavailability of contraceptives due to stock-outs. Lack of access to dependable family planning services can result in closely-spaced births, increasing risks of maternal and perinatal morbidity and mortality.3 Although some African governments are strengthening efforts to reach rural populations with improved health services (for example, through the Kenya Essential Package for Health4), family planning services are not always prioritized, or in some cases even included. The USAID-funded Program Research for Strengthening Services (PROGRESS) project seeks to improve access to family planning for underserved populations. One PROGRESS strategy is to integrate family planning information and services into microfinance programs, environmental groups, and agricultural enterprises that focus primarily on non-health objectives, for example, increasing household income. These institutions promote values such as self-reliance and empowerment, which align naturally with family planning messages on benefits of planning the number of children and spacing of births. This paper reports on a collaborative effort in Kenya – involving the USAID-funded PROGRESS program implemented by FHI 360, the USAID-funded Kenya Dairy Sector Competitiveness Program (KDSCP) implemented by Land O’Lakes, and the Kenyan Ministry of Health to integrate family planning and other health services into community education events in Kenya’s rural dairy sector.
2. Farmer Field Days (FFD)

The KDSCP is one of several USAID-funded projects in the Kenya agricultural sector that support entire value chains, with special emphasis on strengthening skills and knowledge of small-scale farmers. KDSCP’s goal is to increase household incomes of smallholder dairy farmers and stakeholders throughout the Kenya dairy value chain through the sale of quality milk and provision of training and technical assistance. The KDSCP has helped to organize dairy cooperatives throughout the project area (Central and Rift Valley provinces), and has supported cooperatives in organizing participatory extension events called Farmer Field Days (FFD). FFDs offer cooperative members and other community residents an opportunity to learn more about the dairy industry and to contact suppliers and potential customers. One important aspect of the FFDs is that they allow farmers across the socio-economic spectrum to learn from experiences of successful farmers. Two studies in Nigeria have shown that FFDs are effective approaches for transfer of knowledge to participants, and participants think the closely related “Farmer Field School” approach is more effective than other extension approaches.

PROGRESS and the KDSCP together recognized FFDs as a potential platform for providing family planning and other health services to underserved rural residents through a “health camp” model. This model of health service delivery is popular. Mobile teams bring health services to rural areas where poor and needy lack access to facility-based care. These camps typically consist of a temporary clinic located in a non-medical facility such as a school, church, or community hall. Providers offer services and medicines tailored to the needs of the community, usually free of charge. Although variants of the health camp model have been used to provide family planning services in a few countries little is known about providing family planning in conjunction with community gatherings for non-health purposes.

3. Pilot Study of Health Camps at Farmer Field Days

Background: The pilot study took place in rural areas of Central and Rift Valley Provinces in Kenya. We used data from the Kenya Demographic and Health Survey (KDHS-2008/2009) in these two regions to learn more about women aged 18-49 working in the agricultural sector, or whose husbands work in the agricultural sector. Among these women, 52% were currently using contraceptive methods. Of these contraceptive users, approximately two-thirds (68%) obtained their methods from the public sector, and the rest used private-sector sources. Among all the women aged 18-49 working in agriculture in these two provinces, 12% reported they did not know where to obtain a family planning method. The KDHS also showed a 30% unmet need for family planning among rural married women living in the study areas. However, current levels of family planning use and unmet need were unknown among households affiliated with KDSCP-supported cooperatives, many of whom live on small farms far from public or private-sector health facilities.

Objectives: The goal of the study was to assess the introduction of sustainable FP/RH services through Land O’Lakes supported cooperatives. The objective was to demonstrate provision of family planning services through Farmer Field days.

Intervention: PROGRESS and Land O’Lakes staff, working in coordination with local dairy cooperatives, organized and implemented seven health camps, three at FFDs in Central Province and four in Rift Valley Province. The health camps took place during scheduled FFDs between August and December 2010, and each one lasted approximately 9 hours, from 9 AM until 6 PM. Participating cooperatives posted announcements about the health camp one week before the FFD, inviting not just cooperative members but the entire community to attend. Steps required to organize and implement the camps are summarized below.

- Approval from local health authorities. The Division of Reproductive Health within the Kenyan Ministry of Health (MOH) provided a letter of introduction to inform provincial and district health officials about the pilot study. FHI 360 staff then held informational meetings with local health authorities to gain their approval. Stakeholder meetings were also held to inform dairy cooperative leaders about the health camp service model, solicit opinions about elements of the proposed package of services, and gauge the interest of cooperative leadership in sustaining this model financially, if successful. Stakeholders recommended that the package include various health services, not just family planning.

- Site selection and approval by cooperative management. Land O’Lakes field coordinators identified upcoming FFDs supported by mature and well-managed dairy cooperatives. FHI 360 staff visited each site to discuss study plans with cooperative management and to obtain approval for the study. Initial concerns that the health camps would divert farmers’ attention from dairy-related activities were allayed after the first successful field day showed these concerns to be unfounded.

- Selection of health providers. FHI 360 staff visited each site several weeks before the field day to identify health providers to deliver services during the health camps. District health officials provided lists of public and private-sector providers with recent training in family planning. Both private and public health providers were selected based on their availability to work at the field days and on their interest in following up...
with clients who required additional services that were not available at the health camps. To address low drug stocks among private providers, pharmacists were made available at the camps to dispense drugs based on a clinician’s prescription.

- **Service provision.** Three health service providers were available at each health camp, and the service package emphasized women’s health. Family planning services included information and counseling; provision of oral contraceptives, injectables, and condoms; and referrals for long-acting methods. Standard Kenya MOH job aids and checklists were used to help interested clients choose an appropriate family planning method. The service package also included child immunizations, antenatal care, screening and treatment for sexually transmitted infection, HIV counseling and testing, treatment of minor illnesses, and referrals. All services were provided free of charge, but attendees were responsible for the costs of follow-up care and referrals. In Kenya, women pay a nominal fee at a public clinic and various levels of fees at private providers.

- **Approval for data collection.** Ethical approval was received from both FHI360’s PHSC and the KEMRI-ERC.

**Measurement:** Data were collected using four different instruments: a provider service checklist, a questionnaire for female clients, a field day registration sheet, and an expenditure spreadsheet. Each on-site provider filled out a daily checklist to record health services provided to FFD attendees. The checklist was used to understand which services were most popular, and whether services requested by community residents differed from the services requested by cooperative members and dependents. All women 18 to 49 years old who received any health services from an on-site clinician were invited to participate in a survey that included questions about their contraceptive history, use of health services, and opinions about the FFD health camp service model and the package of services offered. The survey also included a series of questions on socio-economic status, enabling the calculation of a wealth index to show whether this intervention reached the poor. At the end of each event, study staff collected total attendance statistics from FFD registers to allow overall utilization of the health camps to be estimated. Finally, we collected data on costs of planning and implementing the health camps in order to inform future scale-up efforts in other cooperatives within Kenya. Main cost elements included costs of organizing stakeholder meetings, identifying providers, pre-event advertising and implementation of health camps at FFDs.

**Results:**

1. Utilization of health services at the seven field days was high. More than 80% of the 2,344 FFD attendees requested health consultations, and 73% were provided to women. The most popular services included general physical examinations (66%), family planning services (18%), and HIV counseling and testing (14%). Men were more likely than women to request HIV counseling and testing, but no men requested family planning services. Over half (58%) of all consultations were provided to people who reported an affiliation with a cooperative.

2. Table 1 presents information on socio-economic characteristics of the 319 women who agreed to participate in the survey of health camp users. The mean age of the women was 33 years. Most were married (76%) and poor (79% in the lowest two wealth quintiles), and about half had no more than a primary education. Slightly less that 40% reported an affiliation with a dairy cooperative, either through family or employment.

3. Two-thirds of the 319 respondents said they knew about the health camp prior to their arrival at the FFD. Women learned about the health camps from different sources, including cooperative officers (46%), cooperative committee members (25%) and neighbors (17%). More than a quarter of the women surveyed said they might not have attended the FFD without the health camp, suggesting that the offer of health services likely increased attendance at the FFD. Overall, 83% of respondents said that they preferred receiving services at the field day rather than at their customary health facility.

4. Contraceptive use among respondents with a need for it (married and non-pregnant) was very high (81%) and the most popular methods were injectables (38%) and pills (17%). In Central Province, the third most popular methods was the intrauterine device (13%) while in Rift Valley Province, the third most popular was the implant (8%). Of the current contraceptive users, 25% reported receiving additional supplies of condoms, pills, or injectables at the field days.

5. Fifteen percent of the surveyed women had an unmet need for contraception, defined as being unmarried, not pregnant, not wanting a child in the next year, and not currently using a modern method of contraception. Unmet need varied by province (9% in Central Province and 21% in Rift Valley Province), but not by age (16% among women under 25 and 16% among women 25 or older). Among women with an unmet need, most said they did not want a contraceptive method, or wanted a method that was not available at the FFD; women in this latter group were referred to the nearest health facility where the method was available. Thus, none of the women grouped according to having an unmet need initiated a modern method of contraception during a field day health camp. Among the 206 women, 87% discussed family planning with a provider, and 20% received a modern method. A greater proportion of women received methods in Rift Valley Province (28%) than
in Central Province (14%)

The average cost to the organizers of carrying out a health camp was US$ 1,445. Of this amount, 37% (US$ 534) represented payments to providers for consultations provided; 24% (US$ 358) were allowances to cover costs of provider transport, lunch and a base level of compensation; and 23% (US$ 328) were costs of medications and supplies. The mean cost per consultation was US $5.87, reflecting mainly the cost of contracting with private physicians to provide services for the pilot project. Services were provided free to clients, which they perceived as beneficial since they avoided out-of-pocket costs: respondents reported paying a mean cost of US $1.85 for services at their last antenatal care visit and US $3.76 for their last family planning service when visiting a health-care provider.

Pilot Study Conclusions: Study results showed that the FFD health camps were heavily utilized, offered easy access to services that women wanted, and effectively targeted the poor. In PROGRESS’s priority area of family planning, FFD health camps reached most women with information about contraception, and offered a convenient opportunity for family planning users to obtain resupply. None of the women classified as having unmet need for contraception chose to initiate modern family planning at the health camp; this is not unusual in fixed health facilities, where on any given day providers may serve returning family planning clients but not initiate new users.

4. Modification of Pilot Model for Scale-up

The FFD health camp model -- like all PROGRESS-supported interventions – was intended to be scaled up if the pilot project was judged to be successful. One challenge was that PROGRESS and KDSCP both were ending in 2013, and the pilot model included substantial financial and technical inputs from both institutions; thus, it was necessary to identify other entities to assume their roles in a scale-up effort. In mid-2012 PROGRESS designed an institutionalization plan (IP) that reviewed all activities conducted as part of the pilot, and distributed them to other stakeholders deliberately in line with their interests and incentive structures. The following adjustments were made to transition to a sustainable model that would rely mainly on local institutions:

Promotion of the Health Camp: In the pilot, KDSCP field coordinators assisted dairy cooperatives with dissemination of FFD health camp promotional announcements at church gatherings and in communities near to event venues. The institutionalization plan delegated this role to APHIAplus Nura ya Bonde, an HIV/AIDS treatment and prevention project implemented by FHI360 and several partners, headquartered in Nakuru. APHIAplus has strong linkages with community health workers and the MoH, making it an ideal partner for coordination of promotion, as well as other roles (see below).

Organization of Venue: In the pilot, PROGRESS staff organized rental and placement of tents for clinicians to examine and counsel clients in a private setting. The institutionalization plan designated APHIAplus to assist dairy cooperatives in approaching major commercial-sector dairy processors to underwrite costs of the venue as a corporate social responsibility gesture. We assumed that commercial-sector processors would welcome the opportunity to “brand” tents and other event-related materials, achieving visibility and goodwill at a relatively low cost.

Clinicians and supplies: In the pilot, PROGRESS staff identified and contracted clinicians to work at the Health Camps, and purchased medical supplies and drugs for the events. The institutionalization activity transferred these responsibilities to local District Health Management Teams (DHMT), recognizing their strong incentives to conduct community outreach under the Government of Kenya’s Community Health Strategy. The institutionalization plan also envisioned incorporating FFD health camps into DHMT workplans in the same way that school and market outreach activities have been included. APHIAplus assumed a coordination role to ensure that DHMT representatives would attend routine cooperative planning meetings where timing and location of field days are decided, and to assist the DHMT with planning for the needed staff time and supplies. We completed the institutionalization strategy, and planned to test it during the FFD season in the final trimester of 2012. Unfortunately, none of the cooperatives in the study areas organized FFDs during this timeframe, and so we were unable to carry out an evaluation of the plan as designed. However, in late January 2013, a cooperative in Koibatek district did organize a field day, and the local DHMT with the support of APHIAplus Nuru ya bonde organized an on-site health camp. Fifteen health workers including nurses, clinical officers and HTC counselors were in attendance to offer services and 70 people received various services during this integrated farmers field day. Previous FFDs organized by this cooperative had brought together only stakeholders in agriculture but this time APHIAplus Nuru ya Bonde and Ministry of Health were involved. Services offered included cervical and breast cancer screening, provision of family planning methods, and HIV testing and counseling. Clients were also treated for common illnesses such as malaria, pneumonia, eye and urinary tract infections. Most of the women who received family planning services were very satisfied with the way services were offered, as expressed by one of the clients:
“The health workers told us about the different methods so that we can choose the method that suits each one of us. Personally, I think the coil (IUCD) is good for me. It was my first time to see the coil. I had previously heard about it but did not know what it looked like. I thought it was a big thing but today I was surprised to learn that it is small and very convenient.”

5. Discussion/Conclusion
This paper has described efforts by PROGRESS and KDSCP to integrate family planning and other health services into community education events in the dairy sector in rural Kenya. The goal was to create and sustain an effective and sustainable model for collaborative health outreach between rural dairy cooperatives and the Ministry of Health. Results of the pilot project were very promising, with high utilization and very favorable feedback from attendees. A sudden reduction in the number of FFD in late 2012 and early 2013 made it impossible to test our institutionalization strategy, which planned to distribute responsibility for Health Camps in line with the incentives and interests of various stakeholders. One question is to determine why the convening mechanism (FFD) all but disappeared during this timeframe. The lack of FFDs may have coincided with the winding down of the KDSCP and the accompanying reduction in activities carried out by KDSCP field coordinators. This raises the larger question of the sustainability of community educational events in rural areas when the development partner hands off responsibility to local entities.

For family planning services, mobile outreach is gaining traction as a promising approach for increasing access to a wider range of methods in remote areas. One of the challenges is mobilizing the community ahead of the outreach effort, to ensure that demand materializes at the right time and place. Even though the institutionalization phase of our project was not implemented, the pilot experience and the experience in Koibatek district suggests that the FFD health camp model could help to address key challenges of mobilizing demand in the community, that can subsequently be satisfied through targeted outreach. Our study showed that FFDs can be leveraged as a convening mechanism, essentially doing the work of community mobilization as well as establishing a time and place for services to be delivered. This approach could be transferred across the agricultural sector in Kenya, where Land O’Lakes and other international partners implement programs with similar objectives and processes as the KDSCP. Potential also exists to promote the model more generally as a mechanism for MoH cooperation with rural voluntary associations throughout the developing world.

Interventions like the health camp also can incentivize creative problem solving among more entrepreneurial stakeholders, possibly leading to positive examples of self-directed change that can inspire other stakeholders to undertake similar efforts. In the immediate aftermath of the pilot project, anecdotal reports showed that participating cooperatives were weighing possible new initiatives, such as encouraging members to pay directly for health services at field days or creating a health scheme in which every member of the cooperative contributes money toward their health needs. One cooperative reportedly implemented a credit arrangement with a health facility that allowed farmers to pay for health care through deductions from their milk revenue. An important outcome of the pilot project was to establish linkages between dairy cooperatives and the MoH, and to open lines of communication that did not exist previously. As a result of these linkages, the DHMTs identified FFDs as opportunities to provide community outreach.

In summary, we believe that the FFD health camp model has great potential, and the model could succeed in other contexts where stakeholder interests and incentives are aligned as they were in Kenya. These stakeholders include a Ministry of Health interested in outreach to areas with difficult access; local affinity groups like dairy cooperatives interested in holistic support to members, and a convening mechanism such as the FFD. There may be a continuing role for international partners in coordination and financing of selected components, but the model should be largely self-supporting if the roles and responsibilities are distributed in line with interest and incentives of stakeholders. Our experience provides another example of how improving linkages across sectors can lead to locally-sustained solutions to improving rural access to family planning and other health services, especially in rural areas among poor women.
Table 1
Characteristics of Female Health Camp Attenders

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Mean or Percent (n = 319)</th>
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</thead>
<tbody>
<tr>
<td>Mean age (in years)</td>
<td>33</td>
</tr>
<tr>
<td>Mean number of children</td>
<td>3</td>
</tr>
<tr>
<td>Percent married/in union</td>
<td>76</td>
</tr>
<tr>
<td>Percent completed primary or higher</td>
<td>50</td>
</tr>
<tr>
<td>Percent poor (lowest two wealth quintiles)</td>
<td>79</td>
</tr>
<tr>
<td>Percent affiliated with dairy cooperative</td>
<td>39</td>
</tr>
</tbody>
</table>

Source: Survey of Health Camp Attenders

Table 2
Family Planning Services Received by Married, Non-pregnant Women, by Contraceptive Need

<table>
<thead>
<tr>
<th>Family Planning Service</th>
<th>Unmet (n = 32)</th>
<th>Current User of Modern Method (n = 166)</th>
<th>No Need (n = 8)</th>
<th>All women (n = 206)</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Discussed family planning</td>
<td>81</td>
<td>89</td>
<td>63</td>
<td>87</td>
</tr>
<tr>
<td>% Received a modern method</td>
<td>0</td>
<td>25</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>% Received a non-modern method</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Survey of Health Camp Attenders

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